



MATERIAL SAFETY DATA SHEET

Bayticol 2% EC *

Company Details

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	South Africa		

1. Product and Company Identification:

<u>Trade / Commercial Name</u>	Bayticol 2% EC *		
<u>Chemical Name</u>	environmentally hazardous substance, liq, NOS		
<u>Formula</u>			
<u>Chemical Family</u>	Pyrethroid Insecticide		
<u>Synonyms</u>			
<u>Un No</u>	3082	<u>Hazchem Code</u>	3xe
<u>ERG No.</u>	171	<u>EAC</u>	31

3. Hazards Identification:

Harmful by inhalation and if swallowed
 Risk of serious damage to eyes
 Irritating to skin
 Harmful: May cause lung damage if swallowed.
 Repeated exposure may cause skin dryness or cracking.
 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment/

3. Composition:

<u>Hazardous Components</u>	Contains:
	Flumethrin
	Weight 2%
	CAS No.: 69770-45-2 □ Index No.: -
	Hazard Symbols T,N □ EINECS No.: 274-110-4
	R-phrases 25-50/53
	Isobutanol
	Weight <5%
	CAS No: 78-83-1 □ □ Index No.: 603-108-00-1
	Hazard Symbol: Xi □ □ EINECS No.: 201-148-0
	R-phrases 10-37/38-41-67
	Tetrapropylene benzene sulphonate Ca Salt
	Weight <5%
	CAS No: 11117-11-6 □ Index No.: -
	Hazard symbol C □ □ EINECS No.: 234-360-7
	R-phrases: 21-34-52/53
	Solvent naphtha
	Weight %: >25%
	Hazard symbols Xn, N
	R-phrases 51/53-65-66

4. First Aid Measures



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First Aid Skin

GENERAL INFORMATION:

Remove patient from danger zone. If there is risk of unconsciousness, position and transport in stable lateral position. Remove soiled or soaked clothing immediately.

Following skin contact:

Wash skin with copious amounts of soap and water

First Aid Eyes

Flush eyes with water for 20 minutes.

Hold eyelids open while washing. Consult eye specialist.

First Aid Ingested

Do not induce vomiting

Seek immediate medical treatment.

INFORMATION FOR THE PHYSICIAN:

The active ingredient contained in this product belongs to the pyrethroid insecticide group.

Treatment: Basic First aid, decontamination, and symptomatic treatment.

First Aid Inhalation

Move victim to fresh air.

If not breathing give artificial respiration.

If breathing of victim is difficult administer oxygen for a maximum period of one hour.

Call a doctor immediately

5.Fire Fighting Measures

Extinguishing media:

Sprayed water jet, extinguishing powder, foam CO2 sand

Combustion gases:

In case of fire: hydrogen chloride, hydrogen cyanide, hydrogen fluoride, carbon monoxide and nitrogen oxides may develop.

Firemen should wear self contained breathing apparatus.

Fire quenching water should be collected.

6.Accidental Release Measures

Full protective clothing including breathing apparatus

Contain (avoid spillage from entering drains or water courses)

PRECAUTIONS:

Restrict access to area.

Provide adequate protective equipment and ventilation.

Remove sources of heat and flame.

Notify occupational and environmental authorities.

SPILL OR LEAK:

Do not touch or walk through spilled material.

Stop leak if you can do it without risk.

Small Spills

Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills

Dike far ahead of liquid spill for later disposal.

Prevent entry into waterways, sewers, basements or confined areas.

Use water and detergents to clean floors and contaminated objects

7.Handling And Storage

Storage in the same room or space is prohibited with the following classes:

The rooms or spaces should be at least 10M apart.

Explosives



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Only handle product with local exhaust ventilation.
Prevent entry into waterways, sewers, basements or confined areas.

Precautions should be taken against electrostatic charges
Vapours can form explosive mixtures with air.

Store away from food ,feed children and uninformed persons.
Store below 25 deg C.
VCI Storage class 3B

8.Exposure Controls/Personal Protection

Occupational Exposure Limits When handling this product ensure adequate ventilation and provide air extraction:
Information regarding Isobutanol:
MAK Value 100 ppm (310 mg/m3)
Peak concentration limit according to Category: = 1 =
There is no danger of impaired fertility provided that the OEL is observed.

Controls The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure.
The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release.
Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside.
Supply sufficient replacement air to make up for air removed.
Have a safety shower/eye wash fountain readily available in the immediate work area

Personal Protection Recommended respiratory protection: Full mask with ABEK filter
Eye Protection: Goggles
Hand Protection: Protective gloves for chemicals made of nitrile rubber.
Information regarding Naptha:
(Breakthrough time >480 min DIN EN 374-3)

9.Physical & Chemical Properties

Form: Liquid clear
Colour: Brown
Odour: Slight characteristic smell
pH: Value Neutral
Melting Point: No statements available
Solidifying Point: 221 oC (Solventnaptha)
Vapour Pressure: 1 mbar (Solventnaptha)
Density: 1.013 g/cm3 at 20 deg C
Flash point: 66 dec C
Ignition Temperature: No statements available
Explosive limits:
Upper explosive limit: 6% (Solventnaptha)
Lower explosive limit 1% (Solventnaptha)

10.Stability And Reactivity

Conditions to Avoid Stable.
Incompatible Materials Keep away from iron. Corrosion of unprotected metal is possible
Other Protect from heat
Hazardous decomposition products
Formation of In case of fire: hydrogen chloride, hydrogen cyanide, hydrogen fluoride, carbon monoxide



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and nitrogen oxides may develop during thermal decomposition.

11. Toxicological Information

Acute toxicity:

LD50 oral rat: > 500 -< 1000 mg/kg

LD50 dermal rat: >5000 mg/kg

Irritation of skin/rabbit: irritant

Irritant to the mucous membranes/rabbit: irritant

12. Ecological Information

Fish toxicity:

LC50: 2.83 mg/l (96h); trout (*Oncorhynchus mykiss*) (OECD No. 203)

Toxicity to Daphnia:

EC50: 0.045 mg/l (48h); Water flea (*Daphnia magna*) (OECD No. 202)

Toxicity for algae:

Increase of the biomass:

IC50: 4.16 mg/l (96 h) Green algae (*Desmodesmus subspicatus*)

Growth rate

IC50: 11.35 mg/l (96 h) Green algae (*Desmodesmus subspicatus*)

13. Disposal Considerations

Disposal Method Product

Choose a specific site where excess fluids may be dumped. This site must not be on the top of a hill and should be at least 100 m away from boreholes and water courses.

Ensure that the area of the site is sufficient. Eg: 0.5 ha for a dip tank of 15 000 litres capacity.

The site should be away from habitation, and not in a general thoroughfare. It should be properly fenced off and clearly identified by warning signs. The gate must be kept locked.

Disposal Method Packaging

Rinse empty container three times with a volume of water equal to at least one tenth of that of the container and add the rinsings to the contents of the dip. Thereafter perforate and flatten the container, and bury it in an area reserved for this purpose as described above, under the section entitled Disposal method product

14. Transport Information

<u>UN No</u>	3082	<u>Hazchem Code</u>	3xe
<u>ERG No.</u>	171	<u>EAC</u>	31
		<u>ADR/RID Hazard ID No</u>	9
<u>IMDG-Shipping Name</u>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.		
<u>IMDG Code</u>	9	<u>IMDG-Packaging Group</u>	III
<u>Marine Pollutant</u>	Yes		
<u>Class</u>	Class: 9 Miscellaneous Group: III		
<u>Subsidiary Risks</u>	None		

15. Regulatory Information

EEC Hazard Classification 9

Risk Phrases

Danger of cumulative effects
R20/22: Harmful by inhalation and if swallowed.
R41: Risk of serious damage to eyes.
R38: Irritating to skin

All information is given in good faith but without guarantee in respect of accuracy and no responsibility is accepted for errors or omissions or the consequences thereof



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Safety Phrases

- R65: Harmful: May cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness and cracking
R50/53: Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
S62: If swallowed do not induce vomiting: seek medical advice immediately
 and this container or label
S39: Wear eye/face protection
S26: In case of contact with eyes, rinse immediately with plenty of water and
 seek medical advice.
S29: Do not empty into drains
S61: Avoid release to the environment. Refer special instructions/Safety data sheet.

National Legislation

16. Other Information

Reason for Alteration: General update. Revision 1 Revision Date: 13 March 2007

The information contained herein is based on the present state of our knowledge.
It characterizes the product with regard to the appropriate safety precautions.
It does not represent a guarantee of the properness of the product.

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